COLORADO DISCHARGE PERMIT SYSTEM (CDPS)
FACT SHEET FOR PERMIT NUMBER CO0021539
UPPER BLUE SANITATION DISTRICT, FARMERS KORNER WASTEWATER TREATMENT FACILITY
SUMMIT COUNTY

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I. TYPE OF PERMIT

A. Permit Type: Minor Amendment

B. Discharge To: Surface Water

II. FACILITY INFORMATION

A. SIC Code: 4952 Sewerage Systems

B. Facility Classification: Class B per Section 100.5.2 of the Water and Wastewater Facility Operator Certification Requirements

C. Facility Location: 0059 Swan Mountain Road, Breckenridge, CO 80424,
Latitude: 39.5667° N, Longitude: 106.0511° W

D. Permitted Feature: Outfall 002B.

The location(s) provided above will serve as the point(s) of compliance for this permit and are appropriate as they are located after all treatment and prior to discharge to the receiving water.

E. Facility Flows: 4.99 MGD

III. PURPOSE OF MODIFICATION

This is a Division initiated modification. The Division conducted a routine inspection on September 14, 2012. Based on findings during the inspection, the Division decided that it would be necessary to modify the permit to provide a clear description of the influent and effluent sampling points, and to eliminate the monitoring requirements for Outfall 002A, which are no longer needed. This modification will clarify and describe the exact monitoring locations for the influent and effluent for this facility.

The Upper Blue Sanitation District has completed construction of a capacity increase under Site Application Number 5062. The facility combines the effluent of two treatment plants at a chlorine contact chamber prior to discharge via Outfall 002B to the Blue River diversion. The old (East/West) plant that existed before the

capacity upgrade is rated at 3.0 MGD, and 8,760 lbs per day BOD_5. The new (North) plant is rated at 2.1 MGD (permitted at 1.99 MGD) and 4,540 lbs per day BOD_5. The current permit authorizes discharge from the old (East/West) plant at Outfall 002A for 3 MGD and the combined discharge from the old plant and the new plant at Outfall 002B for 4.99 MGD.

INFLUENT MONITORING

The influent monitoring location in the permit was defined as Outfall 300I, at a representative point prior to biological treatment; however, with the completion of the new treatment plant, there are currently three influent monitoring locations.

Location 1 is called the Total Farmers Korner Treatment Plant. This influent monitoring point is located at the head of the plant before the influent from camper dump station enters the facility.

Location 2 is called Existing East/West Plant, located between the East/West Plant fine screen and the grit chamber; however, flow measurement is taken after the grit chamber.

Location 3 is called the North Plant, located between the North Plant fine screen and grit chamber; however flow measurement is taken after the grit chamber.

For ease of identification, the three influent monitoring locations have been designated as follows:

Location 1, Total Farmers Korner Treatment Plant influent monitoring as **Outfall 300T**.

Location 2, Existing East/West Plant influent monitoring as **Outfall 300E**.

Location 3, New North Plant influent monitoring as **Outfall 300N**.

Influent to the facility is split to parallel screening channels, the East channel and the West channel. After this split, flow from the camper dump facility and the plant drain pump station (return sidestream flow) is introduced to the West channel. After screening there is a connection of channels and flow is directed to either plant or both. The actual physical arrangement would favor flow from the West channel to be primarily directed to the North Plant, and flow from the East channel primarily directed to the East/West Plant. The influent recombines after screenings at the connection between the channels and is split to the East/West and North Plant using a slide gate flow control structure and measured at Outfall 300E and 300N.

The permittee currently reports influent samples collected at Outfall 300T; however, this does not include influent from the camper dump station. Therefore Outfall 300T is not representative of the facility's total influent. A representative influent monitoring point for this facility would be at the point where all collection system service area and dump station influent is included, such as after the screening.

This modification defines the influent sampling location for this facility as Outfall 300I, at a representative point after screening and upgradient from Outfalls 300E and 300N for BOD and TSS monitoring. Reported flow measurements for 300I shall be calculated to remove return sidestream flows. Sampling shall be conducted without impact of sidestream flows (e.g., while sidestream is off line). BOD and TSS result obtained from sampling Outfall 300I will be applied to 300E and 300 N. Influent flow measurement taken at Outfall 300E and 300N will be used to monitor compliance with the hydraulic loading to the two plants.

EFFLUENT MONITORING

The current permit defines effluent compliance point from the old (East/West) treatment plant as Outfall 002A, and the combined effluent for the old and new plants as Outfall 002B. The permittee currently collects effluent samples at Outfall 002B as specified by the permit, which defines Outfall 002B as following disinfection and prior to mixing with the Blue River diversion; however, flow measurements are taken at two locations for the old and new plant before the effluent combines at the chlorine contact chamber.

The additional plant was constructed to enable the permittee to operate both plants when necessary, especially during the winter period when higher flows are expected; however, there is the possibly that only one plant could be in operation.

Since effluent flow is measured at two different locations before the effluent combines at the chlorine contact chambers, it would be necessary to define these effluent outfalls, which are different from the outfalls defined in the current permit.

For ease of identification, the two measured effluent has been defined as follows:
Outfall 003E is the measured effluent from the old (East/West) plant located at a representative point after the East/West media filtration system and prior to combining at the chlorine contact chamber.
Outfall 003N is the measured effluent from the new (North) plant located at a representative point after the North media filtration system and prior to combining at the chlorine contact chamber.
Reported flows from Outfalls 003E and 003N will be used to monitor compliance with the effluent flow limitations.

Effluent flow limits for the modified permit is as follows:
Outfall 003E – 3.0 MGD
Outfall 003N – 1.99 MGD
Outfall 002B – 4.99 MGD

IV. CHANGES AS A RESULT OF THE MODIFICATION

1. Part I.A.1 - Effluent Limitations, Monitoring Frequencies and Sample Types. Description of Outfalls 003E and 003N has been included.
2. Part I.A.1 - Flow Recording Device. This section was modified to include the description of two influent flow measuring devices (300E and 300N) and two effluent flow measuring devices (003N and 003E).
3. Part I.A.1 Table for Outfall 002A was deleted.
4. Part I.A.1 Table for Outfall 002B. Table heading “Effective January 1, 2012” and “Effluent Limitations and Monitoring Frequencies for the 4.99 MGD Design Capacity” have been deleted.
5. Part I.A.1 Table for Outfall 002B. Sample type for flow monitoring for outfall 002B has been changed to “calculated”, with a footnote specifying that flow for outfall 002B is the flow summation of outfalls 003E and 003N.
6. Part I.A.1 Table for Outfall 002B. Flow restrictions for Outfalls 003E (3.0 MGD) and 003N (1.99 MGD) were included.
7. Part I.A.2 - Monitoring Frequency and Sample Type Influent Parameters. Outfall 300I has been redefined. Influent outfalls 300E and 300N have been included. Table for influent parameter now includes Plant Capacity (% of Capacity – Hydraulic and Organic), with a footnote providing details about percent capacity calculations for outfalls 300I, 300E and 300N.
8. Part I.B.2 - Design Capacity. This section has been modified to include “the old (East/West)” as the description for the 3 MGD design capacity for the East/West domestic wastewater treatment works. The permitted capacity of 1.99 MGD has been included for the new (North) domestic wastewater treatment works. The description for the 4.99 MGD now reads as follows: “Based on Site Approval 5062, the design capacity of the combined old (East/West) and new (North) domestic wastewater treatment works will be 4.99 million gallons per day (MGD) for hydraulic flow (30-day average) and 13,300 lbs BOD_5 per day for organic loading (30-day average).”

12/18/12

V. PUBLIC NOTICE COMMENTS

The public notice period was from November 16, 2012 to December 17, 2012. Comments were received from the Upper Blue Sanitation District. Topical summaries of the comments and the response of the Division are given below. Copies of the comments are located in Division files and will be made available upon request.

Comment:
The flow meters for point 300E and 300N are not located between the fine screen and the grit chamber. Both flow meters are located after the grit chamber.

Response:
Corrections have been made to the factsheet and permit to clarify that the flow meters for 300E and 300N are located after the grit chamber. Part 1.A Flow Recording Device have been modified to state "For this facility, two influent flow recording devices are provided: 300E is located after the East/West Plant grit chamber, and 300N is located after the North Plant grit chamber."

Abigail Ogbe
12/18/12